

1. A method for compressing image data being sent to an imaging device, the method comprising:
 - obtaining capabilities of an imaging device;
 - decompressing image data upstream from a rasterization process of the imaging device;
 - dividing the image data into one or more regions based on image data content;
 - selecting a compression algorithm for each region based on content of each region and on the capabilities of the imaging device;
 - compressing the image data per region using one or more selected compression algorithms; and
 - assembling the compressed regions into a mixed raster format.
2. The method of claim 1, wherein data in each region shares a common characteristic such that when the data is compressed by a lossy algorithm all the data in the region shares the same output quality.
3. The method of claim 1, wherein the image data is divided into one or more regions based on text, line art and graphics.
4. The method of claim 3, wherein the image data is divided into one or more regions further based on luminous planes, color planes, backgrounds and foregrounds.
5. The method of claim 1, wherein the capabilities of the imaging device are obtained directly from the imaging device.
6. The method of claim 1, wherein the capabilities of the imaging device are obtained by querying an imaging service.

7. The method of claim 1, wherein the capabilities of the imaging device are obtained by querying an imaging device database.
8. The method of claim 1, wherein the capabilities comprise supported image file formats, supported compression methods, supported image rendering and enhancement methods, and supported color spaces and gamuts.
9. The method of claim 1, further comprising storing a plurality of region types and associating a plurality of candidate compression algorithms with each region type.
10. The method of claim 1, further comprising using compression rankings in selecting a compression algorithm for each region.
11. The method of claim 1, further comprising sending the mixed raster format of the image data downstream to a rasterization process of the imaging device.
12. A system configured to implement a method for compressing image data being sent to an imaging device, the system comprising:
 - a computing device;
 - executable instructions executable on the computing device, wherein the executable instructions are configured to implement a method comprising:
 - obtaining capabilities of an imaging device;
 - decompressing image data upstream from a rasterization process of the imaging device;
 - dividing the image data into one or more regions based on image data content;
 - selecting a compression algorithm for each region based on content of each region and on the capabilities of the imaging device;
 - compressing the image data per region using one or more selected compression algorithms; and

assembling the compressed regions into a mixed raster format.

13. The system of claim 12, wherein data in each region shares a common characteristic such that when the data is compressed by a lossy algorithm all the data in the region shares the same output quality.

14. The system of claim 12, wherein the image data is divided into one or more regions based on one or more of the following: text, line art, graphics, luminous planes, color planes, backgrounds and foregrounds.

15. The system of claim 12, wherein the capabilities of the imaging device are obtained directly from the imaging device,

16. The system of claim 12, wherein the capabilities of the imaging device are obtained by querying a process that is not part of the imaging device.

17. The system of claim 12, wherein the capabilities comprise supported image file formats, supported compression methods, supported image rendering and enhancement methods and supported color spaces and gamuts.

18. The system of claim 12, further comprising a plurality of region types on the computing device that are each associated with a plurality of candidate compression algorithms.

19. The system of claim 18, further comprising compression rankings on the computing device that are used in selecting a compression algorithm for each region.

20. The system of claim 19, wherein the computing device is in electronic communication with the imaging device and wherein the implemented method further comprises sending the mixed raster format of the image data to the imaging device.

21. A computer-readable medium for storing program data, wherein the program data comprises executable instructions for implementing a method in a computing device for compressing image data being sent to an imaging device, the method comprising:

- obtaining capabilities of an imaging device;
- decompressing image data upstream from a rasterization process of the imaging device;
- dividing the image data into one or more regions based on image data content;
- selecting a compression algorithm for each region based on content of each region and on the capabilities of the imaging device;
- compressing the image data per region using one or more selected compression algorithms; and
- assembling the compressed regions into a mixed raster format.

22. The computer-readable medium of claim 21, wherein the capabilities of the imaging device are obtained directly from the imaging device.

23. The computer-readable medium of claim 21, wherein the capabilities of the imaging device are obtained by querying an imaging service.

24. The computer-readable medium of claim 21, wherein the capabilities of the imaging device are obtained by querying an imaging device database.

25. The computer-readable medium of claim 21, wherein the capabilities comprise supported image file formats, supported compression methods, supported image rendering and enhancement methods and supported colors.

26. The computer-readable medium of claim 21, further comprising storing a plurality of region types and associating a plurality of candidate compression algorithms with each region type.

27. The computer-readable medium of claim 26, further comprising using compression rankings in selecting a compression algorithm for each region.

28. The computer-readable medium of claim 21, further comprising sending the mixed raster format of the image data downstream.